The Value of Wetlands and Watershed Protection

Wetlands are an important component of the ecosystem in Webster. Wetlands are extremely important habitats of rich biodiversity, and they have a valuable role to play in the lives of humans and animals alike in Webster. Whether it is called a marsh, swamp, vernal pool or bog, a wetland is a unique ecosystem – an area of land saturated with water, either permanently or seasonally. Some wetland types are among the most productive ecosystems on earth. They offer critical habitat for fish, waterfowl and other wildlife; they purify water; and they help check the destructive power of floods and storms. They also provide a variety of recreational opportunities and help to preserve the beauty of Webster.

Wetlands are a valuable part of watershed management. A watershed --the land area that drains to a stream, lake or river – affects the water quality in the water bodies. Surface water and stormwater runoff within a watershed ultimately drain to other bodies of water. Healthy watersheds help protect water quality.

Protecting Water Quality in Webster

Webster enacted a groundwater protection ordinance several years ago to protect existing and potential groundwater supply and aquifers. The groundwater protection district helps to prevent aquifer contamination by prohibiting certain uses within the district. This is the water we drink from our wells!

The proposed wetland and watershed protection act has a purpose similar to the groundwater protection ordinance: to protect the quality of Webster's watershed and surface waters by maintaining wetlands. Wetlands are natural filters that reduce pollutants in water, assist in stabilizing the banks to reduce erosion and downstream sediment, reduce flood impacts, and maintain a diverse habitat for plants, wildlife and aquatic organisms. It is essential to consider these downstream impacts and the role wetlands play in the quality of life in Webster.

Wetlands Purify Our Waters

Wetlands are natural filters. When water enters a wetland, it slows down and moves around the plants. Much of the suspended sediment drops out and settles to the wetland floor. Plants absorb excess nutrients in the water from fertilizers, manure, leaking septic tanks and other sources. A certain level of nutrients is necessary in water ecosystems, but excess nutrients can cause algae growth that's harmful to fish and other aquatic life. Wetlands trap sediments and absorb many pollutants in surface water, which helps to purify water. Wetlands improve water quality in nearby rivers and streams, and thus have considerable value as filters for future drinking water.

Wetlands Store Water and Help Prevent Floods

Wetlands work like giant sponges. They store water and then slowly release it. One acre of wetland can store 1.5 million gallons of water. Along rivers and streams they absorb energy and

store water during storms, which reduces downstream flood damage and lessens the risk of flash floods. This slow release of this stored water over time can help keep streams flowing during periods of drought. Wetlands allow water to soak into the ground, and to replenish the natural ground-water supply. In some wetland systems, cleansing function enhances the quality of groundwater.

Wetlands help to control erosion. Sediments are trapped by wetlands. Wetland vegetation binds the soil on streambanks and riparian wetlands, preventing excessive erosion and sedimentation downstream.

When rivers burst their banks, wetlands can store the excess water, and slow it down so it distributes more evenly over a floodplain. The roots of trees and other vegetation also help slow the speed of flood waters.

Wetlands Provide Homes for Animals and Plants

Biodiversity is high around wetlands habitats. Wetlands provide habitat for many species of amphibians, reptiles, birds and mammals that are uniquely adapted to aquatic environments. Upland wildlife like deer and bears use wetlands for food and shelter. Wetlands are vital to many migratory bird species.

Wetlands protect biodiversity and provide habitat for endangered species. Many different kinds of creatures depend on wetlands – and on each other. The insects that are attracted to the plants provide food for other animals like fish, frogs and birds, who in turn attract other predators. The biodiversity of wetlands has produced some incredible specialist species that are only found in these habitats. About one-third of all plants and animals listed as threatened or endangered specials in the U.S. depend on wetlands for their survival.

Economic Benefits

Improved water quality, pollution control and flood prevention, wildlife and fisheries habitat and recreational opportunities are just a few economic benefits that wetlands provide. Protection of wetlands, surface water and the watershed are all essential to the viability of a rural community like Webster. Wetlands and watershed protection support the goals of the Town Hazard Mitigation Plan, by reducing flooding of waterbodies and drainage system washouts. Protection of wetlands reduces the risk of potential physical and economic damages to public and private property critical facilities, infrastructure and historic resources.

Webster is a predominantly rural and residential community. Land use regulations encourage sound management of growth that protects agriculture, open space, environmentally sensitive areas, water quality, natural resources and historic sites – for all residents and users. Webster residents place high priority on the protection and preservation of its land and water resources in order to sustain its way of life for future generations.